

Proof load lifting equipment components, and certify for use

Level 5

Credits 15

Purpose People credited with this unit standard are able to: proof load lifting equipment components, and proof load and visually examine complete assemblies; and record information from proof loading and visual inspection, and certify lifting equipment components for use.

This unit standard is for people involved with inspection and certification of lifting equipment.

Subfield Lifting Equipment

Domain Rigging

Status Registered

Status date 23 February 2007

Date version published 23 February 2007

Planned review date 31 December 2012

Entry information Prerequisite: Unit 23448, *Carry out safety checks of lifting equipment components, and certify for use*, or demonstrate equivalent knowledge and skills.

Accreditation Evaluation of documentation and visit by NZQA and industry.

Standard setting body (SSB) The Skills Organisation

Accreditation and Moderation Action Plan (AMAP) reference 0025

This AMAP can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Special notes

- 1 Legislation relevant to this unit standard includes but is not limited to the Health and Safety in Employment Act 1992.
- 2 Definition
Lifting equipment components – slings, shackles, fittings, pulley blocks.

- 3 Assessment
Evidence is required for:
slings – chain, wire rope, web, round;
shackles – standard, high capacity;
fittings – eyebolts, rigging screws, turnbuckles;
pulley blocks – single sheave, multiple sheave.
- 4 Lifting equipment components must be inspected for wear and damage, and certified to the standards specified in unit standard 23448 prior to proof loading.
- 5 International Accreditation New Zealand (IANZ) requirements are available from <http://www.ianz.govt.nz>.
- 6 Working Load Limit (WLL) specifications are found in the standards listed in manufacturer's specifications.
- 7 Manufacturer's specifications are based on internationally recognised standards which include but are not limited to –

Web Slings

AS 1353: 1997, *Flat synthetic-webbing slings – Product specification, Part 1.*
BS EN 1492: 2004, *Textile slings – Safety – Lifting slings for general service made from certain natural and man-made fibre ropes, Part 1.*
BS EN 1492: 2004, *Textile slings – Safety – Lifting slings for general service made from natural and man-made fibre ropes, Part 4.*

Round Slings

AS 4497: 1997, *Round slings – Synthetic fibre – Product specifications, Part 1.*
BS EN 1492: 2004, *Textile slings – Safety – Lifting slings for general service made from natural and man-made fibre ropes, Part 2.*

Chain Slings

AS 2321.2001 *Short-link chain for lifting purposes.*
AS 3776: 2006, *Lifting components for Grade T chain slings.*
BS EN 818: 1996-2000, *Short link chain for lifting purposes – Safety, Parts 1-6.*
BS EN 1677: 2000, *Components for slings – Safety, Parts 1 and 2.*
ISO 4778:1981, *Chain slings of welded construction – Grades M(4), S(6), and T(8).*
ISO 7593: 1986, *Chain slings assembled by methods other than welding – Grade T(8).*
JIS B 8816: 2004, *Chain slings for lifting purposes.*

Shackles

AS 2741: 2002, *Shackles.*
Federal Specifications RC-C-271D: 1990, *Chains and attachments, welded and weldless.*

Eyebolts and Nuts

BS 4278: 1984, *Specifications for eyebolts for lifting purposes.*
DIN 580: 2003-08, *Eye Bolts.*
DIN 582: 2003-08, *Eye Nuts.*

Rigging Screws and Turnbuckles

BS 4429: 1987, *Specification for rigging screws and turnbuckles for general engineering, lifting purposes, and pipe hanger applications.*

Pulley Blocks

BS MA 47: 1977, *Code of Practice for ship's cargo blocks.*

Wire Rope Slings

BS EN 13414: 2003, *Steel wire rope slings – Safety, Parts 1-3.*

Australian Standards (AS) are available from <http://www.standards.com.au/>.

Japanese Standards (JIS) are available from <http://www.webstore.jsa.or.jp/>.

ISO Standards are available from <http://www.iso.org/>.

CEN/EN Standards are available from <http://www.cenorm.be/>.

British Standards (BS) are available from <http://www.bsonline.bsi-global.com/>.

German Standards (DIN) are available from <http://www2.din.de/index.php?lang=en>.

- 8 Lifting Equipment Engineers of New Zealand (LEENZ) requirements and *Code of Practice for the Safe Use of Lifting Equipment* (referred to as the code of practice), are available from LEENZ Inc, PO Box 13015, Onehunga, Auckland.
- 9 Reference
OSH Approved Code of Practice for Load-Lifting Rigging, available from the Occupational Safety and Health Service of the Department of Labour website, <http://www.osh.dol.govt.nz>.

Elements and performance criteria

Element 1

Proof load lifting equipment components, and proof load and visually examine complete assemblies.

Performance criteria

- 1.1 Test bed for proof loading is calibrated in accordance with International Accreditation New Zealand (IANZ) requirements.
- 1.2 Lifting equipment components are proof loaded on test bed in accordance with manufacturer's specifications.
- 1.3 Lifting equipment components are proof loaded in accordance with WLL specifications.
- 1.4 Complete assemblies are visually examined for damage, permanent stretch, or deformation in accordance with manufacturer's specifications.

Element 2

Record information from proof loading and visual inspection, and certify lifting equipment components for use.

Performance criteria

- 2.1 Information from proof loading and visual inspection is recorded in accordance with LEENZ requirements.
- 2.2 Proof load certification is completed in accordance with LEENZ requirements.

Please note

Providers must be accredited by the Qualifications Authority, or an inter-institutional body with delegated authority for quality assurance, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be accredited by the Qualifications Authority before they can register credits from assessment against unit standards.

Accredited providers and Industry Training Organisations assessing against unit standards must engage with the moderation system that applies to those standards.

Accreditation requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact The Skills Organisation at reviewcomments@skills.org.nz if you wish to suggest changes to the content of this unit standard.